

Attorney Docket No.: PENN-0742
Inventors: Lu, Zhe
Serial No.: 09/743,054
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A modified tertiapin peptide comprising SEQ ID NO:1.

Claims 2-4 (canceled).

Claim 5 (currently amended): A method of identifying compounds capable of inhibiting channel activity of inward-rectifier potassium channels comprising:

(a) administering a test compound to an animal or cell culture system;

(b) measuring channel activity of inward-rectifier potassium channels in the animal or cell culture system;

(c) and comparing the measured channel activity with a level of channel activity of the inward-rectifier potassium channels following administration of tertiapin or modified tertiapin peptide of claim 1 to the animal or cell culture system, wherein a measured channel activity equal to or less than the levels of channel activity following administration of tertiapin or a modified tertiapin peptide of claim 1 is indicative of the test compound being an inhibitor.

Claim 6 (currently amended): A method of identifying compounds capable of inhibiting channel activity of inward-rectifier potassium channels comprising:

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(a) administering detectably labeled tertiapin or modified tertiapin peptide of claim 1 to a cell culture system, purified inward rectifier potassium channels or an animal;

(b) administering a test compound to the cell culture, purified inward-rectifier potassium channels or animal;

(c) and detecting unbound labeled tertiapin or the modified tertiapin peptide of claim 1 wherein the presence of unbound labeled tertiapin or the modified tertiapin peptide of claim 1 is indicative of the test compound being an inhibitor.

Claim 7 (currently amended): A pharmaceutical composition comprising a ~~compound having a tertiapin-like α helix~~ compound comprising amino acid residues 11 to 21 or 12 to 21 of SEQ ID NO:1 or SEQ ID NO:2 and a pharmaceutically acceptable vehicle.

Claim 8 (original): The pharmaceutical composition of claim 7 wherein the compound comprises SEQ ID NO:2.

Claims 9-14 (canceled).